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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/527,942

03/16/2005

Beat Herrmann

H58-041 US

2408

21706

7590

02/09/2006

NOTARO AND MICHALOS

100 DUTCH HILL ROAD

SUITE 110

ORANGEBURG, NY 10962-2100

EXAMINER

HOANG, ANN THI

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/527,942	HERRMANN, BEAT	
	<b>Examiner</b>	<b>Art Unit</b>	
	Ann T. Hoang	2836	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on 16 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 4 and 9 is/are rejected.
- 7) ☒ Claim(s) 2-3 and 5-8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                    |                                                                             |
|----------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date: _____                                                |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>10/3/05</u>                                                               | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Specification***

1. 1. The specification is objected to for the following reason: On page 3, lines 8-11, neither claim 1 nor the dependent claims should be referred to, as the disclosure of the invention should not rely on the claims. Appropriate correction is required.

### ***Claim Objections***

2. Claim 1 is objected to because of the following informality: The claim is unclear because lines 6-7 of the claim recite a gas capsule diverter in the connection between the inner conductor and the housing, while lines 8-9 recite two gas capsule diverters in the connection between the inner conductor and the housing. Appropriate correction is required.

3. Claim 1 is objected to because of the following informality: In line 13 of the claim, "this contact point" should be replaced with --the contact point-- or --said contact point-- in order to be consistent with proper claim language. Appropriate correction is required.

4. Claim 2 is objected to because there is a lack of antecedent basis for "the diode" in line 6 of the claim. Appropriate correction is required.

5. Claim 2 is objected to because of the following informality: In line 4 of the claim, "this resistance element" should be replaced with --the resistance element-- or --said resistance element-- in order to be consistent with proper claim language. Appropriate correction is required.

6. Claim 3 is objected to because there is a lack of antecedent basis for “the inductor” in line 4 of the claim. Appropriate correction is required.
7. Claim 3 is objected to because of the following informality: In line 4 of the claim, “this interrupter switch” should be replaced with --the interrupter switch-- or --said interrupter switch-- in order to be consistent with proper claim language. Appropriate correction is required.
8. Claim 4 is objected to because there is a lack of antecedent basis for “the first gas capsule diverter” in line 3 of the claim. Appropriate correction is required.
9. Claim 4 is objected to because of the following informality: It appears that “the inner connector” in line 3 of the claim should be replaced with --the inner conductor--. Appropriate correction is required.
10. Claim 5 is objected to because of the following informality: In line 3 of the claim, “this interrupter switch” should be replaced with --the interrupter switch-- or --said interrupter switch-- in order to be consistent with proper claim language. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

12. Claims 1, 4 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over the acknowledged prior art in view of Swart (US 2,032,513). The acknowledged prior art of Applicant's disclosure describes an anti-interference filter and lightning arrester device in a coaxial line for the transmission of high-frequency signals, comprising a housing with two connectors, the housing forming an outer conductor connected to ground, an inner conductor carried through the housing, a connection between the inner conductor and the housing for the diverting of overvoltages and a gas capsule diverter in the connection between the inner conductor and the housing. See page 1, first paragraph and line 1 of second paragraph. Applicant's disclosure of the prior art does not include two gas capsule diverters that are interconnected in series in the connection between inner conductor and housing, or a switching configuration with an interrupter element.

However, Swart discloses an overvoltage protection system that comprises two gas capsule diverters ( $P_1$ ,  $P_2$ ) interconnected in series, wherein between the two gas capsule diverters a contact point is disposed and a switching configuration with an interrupter element ( $R_{10}$ ) for the interruption of current flowing across the gas capsule diverters is disposed between the contact point and a negative power terminal assumed to be ground. Interrupter element ( $R_{10}$ ) is a relay, the operation of which shunts and extinguishes gas capsule diverters ( $P_1$ ,  $P_2$ ). The operation of the interrupter element prevents permanent grounding of the gas capsule diverters, as disclosed by the reference. See Fig. 1; column 1, lines 38-40; and column 3, lines 31-42. It would have been obvious to one of ordinary skill in the art at the time of the invention to use the

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configuration of the two gas capsule diverters interconnected in series with a switching configuration with an interrupter element disposed between them, as disclosed by Swart, in place of the single gas capsule diverter disclosed by the acknowledged prior art, in order to provide a means to extinguish and prevent permanent grounding of the gas capsule diverter after the occurrence of an overvoltage.

Regarding claim 4, prior art of Applicant's disclosure describes a decoupling line connected with the inner conductor and disposed between the inner conductor and a gas capsule diverter. See page 6, second paragraph; page 8, third paragraph and page 9, first paragraph. Applicant's disclosure of the prior art also references documents (WO 99/43052) and (EP 0 938 166 A1) as disclosing this limitation.

Regarding claim 9, prior art of Applicant's disclosure describes that the decoupling line is a  $\lambda/4$  line. See page 6, second paragraph; page 8, third paragraph and page 9, first paragraph. Applicant's disclosure of the prior art also references documents (WO 99/43052) and (EP 0 938 166 A1) as disclosing this limitation.

### ***Allowable Subject Matter***

13. Claims 2-3 and 5-8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 2-3 and 5-8, prior art fails to teach an anti-interference filter and lightning arrester device with a switching configuration that comprises a resistance

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element connected with a contact point between two gas capsule diverters, a voltage limiting element connected in series with the resistance element, and a coil of a switching relay also connected in series with the resistance element, the voltage limiting element and the coil of the switching relay being connected in parallel, in combination with the other limitations recited in the claims.

### ***Conclusion***

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Farmer (US 2,650,301) discloses a timing circuit in which a three-electrode gas tube is connected to a switching device at its center electrode. Terry (2,379,262) discloses a control circuit employing three-electrode gas tubes that are connected to switching devices at their center electrodes. Kaczmarek et al. (US 4,907,120) discloses a line protection circuit comprising a three-electrode gas tube that is connected to ground at its center electrode.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ann T. Hoang, whose telephone number is 571-272-2724. The examiner can normally be reached Monday through Friday, 8:00 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus, can be reached at 571-272-2058. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ATH  
2/3/06



**PHUONG T. VU**  
**PRIMARY EXAMINER**